

Eugene A Eliseev

List of Publications by Year in descending order

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254
papers

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citations

32410

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docs citations

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times ranked

7991
citing authors

#	ARTICLE	IF	CITATIONS
1	Control of Domain States in Rhombohedral Lead Zirconate Titanate Films via Misfit Strains and Surface Charges. <i>Advanced Electronic Materials</i> , 2022, 8, 2100386.	2.6	2
2	Oxygen Vacancy Injection as a Pathway to Enhancing Electromechanical Response in Ferroelectrics. <i>Advanced Materials</i> , 2022, 34, e2106426.	11.1	20
3	Hypothesis Learning in Automated Experiment: Application to Combinatorial Materials Libraries. <i>Advanced Materials</i> , 2022, 34, e2201345.	11.1	30
4	Chemical control of polarization in thin strained films of a multiaxial ferroelectric: Phase diagrams and polarization rotation. <i>Physical Review B</i> , 2022, 105, .	1.1	2
5	Highly enhanced ferroelectricity in HfO ₂ -based ferroelectric thin film by light ion bombardment. <i>Science</i> , 2022, 376, 731-738.	6.0	58
6	Observability of negative capacitance of a ferroelectric film: Theoretical predictions. <i>Physical Review B</i> , 2022, 105, .	1.1	2
7	Size Effect of Local Current-Voltage Characteristics of MX ₂ Nanoflakes: Local Density of States Reconstruction from Scanning Tunneling Microscopy Experiments. <i>Physical Review Applied</i> , 2022, 17, .	1.5	0
8	Dynamic control of ferroionic states in ferroelectric nanoparticles. <i>Acta Materialia</i> , 2022, 237, 118138.	3.8	2
9	Predictability as a probe of manifest and latent physics: The case of atomic scale structural, chemical, and polarization behaviors in multiferroic Sm-doped BiFeO ₃ . <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	7
10	Investigating phase transitions from local crystallographic analysis based on statistical learning of atomic environments in 2D MoS ₂ -ReS ₂ . <i>Applied Physics Reviews</i> , 2021, 8, 011409.	5.5	7
11	Correlation Between Corrugation-Induced Flexoelectric Polarization and Conductivity of Low-Dimensional Transition Metal Dichalcogenides. <i>Physical Review Applied</i> , 2021, 15, .	1.5	12
12	Exploring Responses of Contact Kelvin Probe Force Microscopy in Triple-Cation Double-Halide Perovskites. <i>Journal of Physical Chemistry C</i> , 2021, 125, 12355-12365.	1.5	3
13	Flexo-elastic control factors of domain morphology in core-shell ferroelectric nanoparticles: Soft and rigid shells. <i>Acta Materialia</i> , 2021, 212, 116889.	3.8	9
14	A combined theoretical and experimental study of the phase coexistence and morphotropic boundaries in ferroelectric-antiferroelectric-antiferrodistortive multiferroics. <i>Acta Materialia</i> , 2021, 213, 116939.	3.8	3
15	Chiral polarization textures induced by the flexoelectric effect in ferroelectric nanocylinders. <i>Physical Review B</i> , 2021, 104, .	1.1	13
16	Stress-induced phase transitions in nanoscale $Cu \ln P_2 S_6$. <i>Physical Review B</i> , 2021, 104, .	1.1	14
17	Flexosensitive polarization vortices in thin ferroelectric films. <i>Physical Review B</i> , 2021, 104, .	1.1	9
18	Effect of Surface Ionic Screening on Polarization Reversal and Phase Diagrams in Thin Antiferroelectric Films for Information and Energy Storage. <i>Physical Review Applied</i> , 2021, 16, .	1.5	9

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19	Multi-objective Bayesian optimization of ferroelectric materials with interfacial control for memory and energy storage applications. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	15
20	Controlling the domain structure of ferroelectric nanoparticles using tunable shells. <i>Acta Materialia</i> , 2020, 183, 36-50.	3.8	18
21	Piezoelectric domain walls in van der Waals antiferroelectric CuInP2Se6. <i>Nature Communications</i> , 2020, 11, 3623.	5.8	47
22	Dynamic Manipulation in Piezoresponse Force Microscopy: Creating Nonequilibrium Phases with Large Electromechanical Response. <i>ACS Nano</i> , 2020, 14, 10569-10577.	7.3	14
23	Melting of spatially modulated phases at domain wall/surface junctions in antiferrodistortive multiferroics. <i>Physical Review B</i> , 2020, 102, .	1.1	5
24	Causal analysis of competing atomistic mechanisms in ferroelectric materials from high-resolution scanning transmission electron microscopy data. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	21
25	Flexoinduced ferroelectricity in low-dimensional transition metal dichalcogenides. <i>Physical Review B</i> , 2020, 102, .	1.1	15
26	Strain Engineering of Ferromagnetic-Graphene-Ferroelectric Nanostructures. <i>Physical Review Applied</i> , 2020, 14, .	1.5	5
27	Bayesian inference in band excitation scanning probe microscopy for optimal dynamic model selection in imaging. <i>Journal of Applied Physics</i> , 2020, 128, 054105.	1.1	8
28	Exploring physics of ferroelectric domain walls via Bayesian analysis of atomically resolved STEM data. <i>Nature Communications</i> , 2020, 11, 6361.	5.8	17
29	Phenomenological description of bright domain walls in ferroelectric-antiferroelectric layered chalcogenides. <i>Physical Review B</i> , 2020, 102, .	1.1	10
30	Electric field control of three-dimensional vortex states in core-shell ferroelectric nanoparticles. <i>Acta Materialia</i> , 2020, 200, 256-273.	3.8	21
31	Phase diagrams of single-layer two-dimensional transition metal dichalcogenides: Landau theory. <i>Physical Review B</i> , 2020, 101, .	1.1	7
32	Strain-polarization coupling mechanism of enhanced conductivity at the grain boundaries in BiFeO3 thin films. <i>Applied Materials Today</i> , 2020, 20, 100740.	2.3	7
33	Mesoscopic structure of mixed type domain walls in multiaxial ferroelectrics. <i>Physical Review Materials</i> , 2020, 4, .	0.9	3
34	Phenomenological theory of defect driven flexo-chemical phenomena in ferroics. <i>Ferroelectrics</i> , 2020, 569, 62-69.	0.3	2
35	Mesoscopic theory of defect ordering and disordering transitions in thin oxide films. <i>Scientific Reports</i> , 2020, 10, 22377.	1.6	0
36	Bayesian Microscopy: Model Selection for Extracting Weak Nonlinearities from Scanning Probe Microscopy Data. <i>Microscopy and Microanalysis</i> , 2020, 26, 2126-2127.	0.2	0

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37	Effective flexoelectric and flexomagnetic response of ferroics. Solid State Physics, 2019, 70, 237-289.	1.3	9
38	Intrinsic structural instabilities of domain walls driven by gradient coupling: Meandering antiferrodistortive-ferroelectric domain walls in BiFeO ₃ . Physical Review B, 2019, 99, .	1.1	22
39	Kinetics of interfacial microstructural variation across insulator-thermoelectric semiconductor interface and its effects on thermoelectric properties of magnesium silicide thin films. Materialia, 2019, 7, 100375.	1.3	0
40	Building a free-energy functional from atomically resolved imaging: Atomic-scale phenomena in La-doped BiFeO_3 . Physical Review B, 2019, 99, .	1.1	11
41	Size effect of soft phonon dispersion in nanosized ferroics. Physical Review B, 2019, 99, .	1.1	3
42	Giant negative electrostriction and dielectric tunability in a van der Waals layered ferroelectric. Physical Review Materials, 2019, 3, .	0.9	47
43	Analytical description of the size effect on pyroelectric and electrocaloric properties of ferroelectric nanoparticles. Physical Review Materials, 2019, 3, .	0.9	15
44	Photothermoelastic contrast in nanoscale infrared spectroscopy. Applied Physics Letters, 2018, 112, 033105.	1.5	8
45	Flexoelectricity induced spatially modulated phases in ferroics and liquid crystals. Journal of Molecular Liquids, 2018, 267, 550-559.	2.3	13
46	Defect-driven flexochemical coupling in thin ferroelectric films. Physical Review B, 2018, 97, .	1.1	39
47	Nontrivial temperature behavior of the carrier concentration in graphene on ferroelectric substrate with domain walls. Acta Materialia, 2018, 155, 302-317.	3.8	16
48	Rotomagnetic coupling in fine-grained multiferroic BiFeO_3 : Theory and experiment. Physical Review B, 2018, 97, .	1.1	22
49	New trends in fundamental research due to the spontaneous flexoelectric effect in nanosized and bulk ferroelectrics. Ferroelectrics, 2018, 532, 67-88.	0.3	4
50	Ferroelectricity induced by oxygen vacancies in relaxors with perovskite structure. Physical Review B, 2018, 98, .	1.1	35
51	Hidden symmetry of flexoelectric coupling. Physical Review B, 2018, 98, .	1.1	7
52	Control of polarization reversal temperature behavior by surface screening in thin ferroelectric films. Acta Materialia, 2018, 160, 57-71.	3.8	17
53	Analytical description of domain morphology and phase diagrams of ferroelectric nanoparticles. Acta Materialia, 2018, 160, 109-120.	3.8	24
54	Fixed volume effect on polar properties and phase diagrams of ferroelectric semi-ellipsoidal nanoparticles. European Physical Journal B, 2018, 91, 1.	0.6	5

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55	Labyrinthine domains in ferroelectric nanoparticles: Manifestation of a gradient-induced morphological transition. <i>Physical Review B</i> , 2018, 98, .	1.1	35
56	Flexocoupling impact on the kinetics of polarization reversal. <i>Physical Review B</i> , 2017, 95, .	1.1	7
57	Size effects of ferroelectric and magnetoelectric properties of semi-ellipsoidal bismuth ferrite nanoparticles. <i>Journal of Alloys and Compounds</i> , 2017, 714, 303-310.	2.8	14
58	Mixed electrochemicalâ€“ferroelectric states in nanoscale ferroelectrics. <i>Nature Physics</i> , 2017, 13, 812-818.	6.5	98
59	Piezoresponse of ferroelectric films in ferroionic states: Time and voltage dynamics. <i>Applied Physics Letters</i> , 2017, 110, 182907.	1.5	16
60	Thermodynamic potential and phase diagram for multiferroic bismuth ferrite (BiFeO ₃). <i>Npj Computational Materials</i> , 2017, 3, .	3.5	62
61	Flexocoupling-induced soft acoustic modes and the spatially modulated phases in ferroelectrics. <i>Physical Review B</i> , 2017, 96, .	1.1	17
62	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \rangle \hat{a} \langle \text{mml:mtext} \rangle \langle \text{mml:mi} \rangle \text{n} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ Junction Dynamics Induced in a Graphene Channel by Ferroelectric-Domain Motion in the Substrate. <i>Physical Review Applied</i> , 2017, 8, .	1.5	22
63	Tuning the polar states of ferroelectric films via surface charges and flexoelectricity. <i>Acta Materialia</i> , 2017, 137, 85-92.	3.8	51
64	Effect of surface ionic screening on the polarization reversal scenario in ferroelectric thin films: Crossover from ferroionic to antiferroionic states. <i>Physical Review B</i> , 2017, 96, .	1.1	26
65	Lost surface waves in nonpiezoelectric solids. <i>Physical Review B</i> , 2017, 96, .	1.1	23
66	Ferroionic states in ferroelectric thin films. <i>Physical Review B</i> , 2017, 95, .	1.1	57
67	3D polarization texture of a symmetric 4-fold flux closure domain in strained ferroelectric PbTiO ₃ films. <i>Journal of Materials Research</i> , 2017, 32, 957-967.	1.2	13
68	Effect of the strain rate on the mechanical properties of a sheet TRIP steel with a high martensite content. <i>Russian Metallurgy (Metally)</i> , 2017, 2017, 319-321.	0.1	0
69	Influence of the tempering temperature on the mechanical properties and the phase composition of thin sheet TRIP steel. <i>Russian Metallurgy (Metally)</i> , 2017, 2017, 867-870.	0.1	2
70	Effect of the removal of the surface layer of a TRIP steel sheet on its phase composition after static tension at various strain rates. <i>Russian Metallurgy (Metally)</i> , 2016, 2016, 34-38.	0.1	5
71	Landau-Ginzburg description of anomalous properties of novel room temperature multiferroics Pb _{0.5} (Fe _{1/2} Ta _{1/2}) _x (Zr _{0.53} Ti _{0.47}) _{1-x} O ₃ and Pb _{0.5} (Fe _{1/2} Nb _{1/2}) _x (Zr _{0.53} Ti _{0.47}) _{1-x} O ₃ . <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	9
72	Ballistic conductivity of graphene channel with p-n junction at ferroelectric domain wall. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	19

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73	Surface and finite size effects impact on the phase diagrams, polar, and dielectric properties of (Sr,Bi)Ta ₂ O ₉ ferroelectric nanoparticles. Journal of Applied Physics, 2016, 119, .	1.1	35
74	Quantitative lateral and vertical piezoresponse force microscopy on a PbTiO ₃ single crystal. Journal of Applied Physics, 2016, 120, 124106.	1.1	10
75	Size-effect in layered ferrielectric CuInP ₂ S ₆ . Applied Physics Letters, 2016, 109, .	1.5	66
76	Extrinsic size effect of pyroelectric response of ferroelectric films. Journal of Applied Physics, 2016, 120, 174102.	1.1	5
77	Influence of elastic strain gradient on the upper limit of flexocoupling strength, spatially modulated phases, and soft phonon dispersion in ferroics. Physical Review B, 2016, 94, .	1.1	36
78	Self-consistent theory of nanodomain formation on nonpolar surfaces of ferroelectrics. Physical Review B, 2016, 93, .	1.1	13
79	Enhancement of Dielectric Properties in Epitaxial Bismuth Ferrite/Bismuth Samarium Ferrite Superlattices. Advanced Electronic Materials, 2016, 2, 1600170.	2.6	8
80	Spontaneous flexoelectric effect in nanosystems (topical review). Ferroelectrics, 2016, 500, 90-98.	0.3	9
81	Flexocoupling impact on size effects of piezoresponse and conductance in mixed-type ferroelectric semiconductors under applied pressure. Physical Review B, 2016, 94, .	1.1	32
82	Effect of the phase composition of the surface layer on the mechanical properties of 23Kh15N5AM3-Sh TRIP steel sheets. Russian Metallurgy (Metally), 2016, 2016, 361-364.	0.1	1
83	Topological Defects in Ferroic Materials. Springer Series in Materials Science, 2016, , 181-197.	0.4	2
84	Room-temperature paramagnetolectric effect in magnetoelectric multiferroics Pb(Fe _{1/2} Nb _{1/2})O ₃ and its solid solution with PbTiO ₃ . Journal of Materials Science, 2016, 51, 5330-5342.	1.7	57
85	Linear antiferrodistortive-antiferromagnetic effect in multiferroics: Physical manifestations. Physical Review B, 2015, 92, .	1.1	14
86	Flexocoupling impact on the generalized susceptibility and soft phonon modes in the ordered phase of ferroics. Physical Review B, 2015, 92, .	1.1	29
87	Self-consistent modelling of electrochemical strain microscopy in mixed ionic-electronic conductors: Nonlinear and dynamic regimes. Journal of Applied Physics, 2015, 118, .	1.1	15
88	Rotomagnetic couplings influence on the magnetic properties of antiferrodistortive antiferromagnets. Journal of Applied Physics, 2015, 118, .	1.1	8
89	Finite-size effects of hysteretic dynamics in multilayer graphene on a ferroelectric. Physical Review B, 2015, 91, .	1.1	17
90	Effect of annealing on the charge-voltage characteristics of SrBi ₂ (TaxNb _{1-x}) ₂ O ₉ films. Physica B: Condensed Matter, 2015, 464, 1-8.	1.3	5

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91	Observation of a periodic array of flux-closure quadrants in strained ferroelectric PbTiO ₃ films. Science, 2015, 348, 547-551.	6.0	430
92	Finite size effects in ferroelectric-semiconductor thin films under open-circuit electric boundary conditions. Journal of Applied Physics, 2015, 117, .	1.1	29
93	CuInP ₂ S ₆ Room Temperature Layered Ferroelectric. Nano Letters, 2015, 15, 3808-3814.	4.5	328
94	Symmetry Breaking and Electrical Frustration during Tip-Induced Polarization Switching in the Nonpolar Cut of Lithium Niobate Single Crystals. ACS Nano, 2015, 9, 769-777.	7.3	58
95	The Structure of a 180-Degree Domain Wall near the Surface of Ferroics. Ukrainian Journal of Physics, 2015, 60, 627-633.	0.1	0
96	Influence of Electrocapillarity on the Water Meniscus Shape In The Atomic Force Microscopy. Ukrainian Journal of Physics, 2015, 60, 799-807.	0.1	0
97	Interface control of a morphotropic phase boundary in epitaxial samarium modified bismuth ferrite superlattices. Physical Review B, 2014, 90, .	1.1	19
98	Reply to "Comment on "Origin of piezoelectric response under a biased scanning probe microscopy tip across a 180° ferroelectric domain wall". Physical Review B, 2014, 89, .	1.1	3
99	Electrostrictive and electrostatic responses in contact mode voltage modulated scanning probe microscopies. Applied Physics Letters, 2014, 104, 232901.	1.5	44
100	Controlled mechanical modification of manganite surface with nanoscale resolution. Nanotechnology, 2014, 25, 475302.	1.3	8
101	Novel room temperature multiferroics on the base of single-phase nanostructured perovskites. Journal of Applied Physics, 2014, 116, .	1.1	31
102	Nonlinear space charge dynamics in mixed ionic-electronic conductors: Resistive switching and ferroelectric-like hysteresis of electromechanical response. Journal of Applied Physics, 2014, 116, 066808.	1.1	29
103	Effect of Vegard strains on the extrinsic size effects in ferroelectric nanoparticles. Physical Review B, 2014, 90, .	1.1	34
104	Intermittency, quasiperiodicity and chaos in probe-induced ferroelectric domain switching. Nature Physics, 2014, 10, 59-66.	6.5	129
105	Electric-field induced ferromagnetic phase in paraelectric antiferromagnets. Physical Review B, 2014, 89, .	1.1	22
106	Ferroelectric domain triggers the charge modulation in semiconductors (invited). Journal of Applied Physics, 2014, 116, 066817.	1.1	16
107	Elastic Coupling between Nonferroelastic Domain Walls. Physical Review Letters, 2014, 113, 207601.	2.9	12
108	Misfit strain driven cation inter-diffusion across an epitaxial multiferroic thin film interface. Journal of Applied Physics, 2014, 115, .	1.1	30

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109	Self-consistent modeling of electrochemical strain microscopy of solid electrolytes. Nanotechnology, 2014, 25, 445701.	1.3	22
110	Direct observation of ferroelectric field effect and vacancy-controlled screening at the BiFeO ₃ /La _x Sr _{1-x} MnO ₃ interface. Nature Materials, 2014, 13, 1019-1025.	13.3	218
111	Ionic field effect and memristive phenomena in single-point ferroelectric domain switching. Nature Communications, 2014, 5, 4545.	5.8	48
112	Optimization of the technological conditions of producing thin sheets and strips from corrosion-resistant VNS9-Sh steel. Russian Metallurgy (Metally), 2014, 2014, 39-43.	0.1	5
113	Flexoelectricity and ferroelectric domain wall structures: Phase-field modeling and DFT calculations. Physical Review B, 2014, 89, .	1.1	101
114	Defect thermodynamics and kinetics in thin strained ferroelectric films: The interplay of possible mechanisms. Physical Review B, 2014, 89, .	1.1	28
115	Oxide nanomaterials with properties absent in bulk (Author Review). Powder Metallurgy and Metal Ceramics, 2013, 52, 32-38.	0.4	4
116	Domain Wall Conduction and Polarization-Mediated Transport in Ferroelectrics. Advanced Functional Materials, 2013, 23, 2592-2616.	7.8	113
117	Mechanical Control of Electroresistive Switching. Nano Letters, 2013, 13, 4068-4074.	4.5	55
118	Local ferroelectric properties in polyvinylidene fluoride/barium lead zirconate titanate nanocomposites: Interface effect. Journal of Applied Physics, 2013, 114, .	1.1	17
119	Universal emergence of spatially modulated structures induced by flexoantiferrodistortive coupling in multiferroics. Physical Review B, 2013, 88, .	1.1	37
120	New multiferroics based on Eu _x Sr _{1-x} TiO ₃ nanotubes and nanowires. Journal of Applied Physics, 2013, 113, 024107.	1.1	24
121	Effective piezoelectric response of twin walls in ferroelectrics. Journal of Applied Physics, 2013, 113, .	1.1	16
122	Spatially Resolved Mapping of Oxygen Reduction/Evolution Reaction on Solid-Oxide Fuel Cell Cathodes with Sub-10 nm Resolution. ACS Nano, 2013, 7, 3808-3814.	7.3	25
123	Epitaxial Bi ₅ Ti ₃ FeO ₁₅ as a Matrix Multiferroic Nanostructures. ACS Nano, 2013, 7, 11079-11086.	7.3	55
124	Ferroc properties of nanosized SnO ₂ . Phase Transitions, 2013, 86, 903-909.	0.6	1
125	Ferromagnetism induced by magnetic vacancies as a size effect in thin films of nonmagnetic oxides. Thin Solid Films, 2013, 534, 685-692.	0.8	10
126	Structural phase transitions and electronic phenomena at 180-degree domain walls in rhombohedral BaTiO ₃ . Physical Review B, 2013, 87, .	1.1	49

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127	Orbital symmetry, monoclinic ferroelectric phase stabilized by oxygen octahedra rotations in strained Eu _x Sr _{1-x} TiO ₃ . Physical Review B, 2013, 87, 041101.	1.1	16
128	Interplay of Octahedral Tilts and Polar Order in BiFeO ₃ Films. Advanced Materials, 2013, 25, 2497-2504.	11.1	101
129	Variable temperature electrochemical strain microscopy of Sm-doped ceria. Nanotechnology, 2013, 24, 145401.	1.3	19
130	Ferroelectric Control of the Conduction at the LaAlO ₃ /SrTiO ₃ Heterointerface. Advanced Materials, 2013, 25, 3357-3364.	11.1	90
131	Mesoscopic mechanism of the domain wall interaction with elastic defects in uniaxial ferroelectrics. Journal of Applied Physics, 2013, 113, .	1.1	9
132	Electrochemical strain microscopy with blocking electrodes: The role of electromigration and diffusion. Journal of Applied Physics, 2012, 111, 014114.	1.1	21
133	Surface polar states and pyroelectricity in ferroelastics induced by flexo-roto field. Applied Physics Letters, 2012, 100, .	1.5	38
134	Anisotropic conductivity of uncharged domain walls in BiFeO ₃ . Physical Review B, 2012, 86, .	1.1	64
135	Origin of piezoelectric response under a biased scanning probe microscopy tip across a 180° ferroelectric domain wall. Physical Review B, 2012, 86, .	1.1	26
136	Three-dimensional vector electrochemical strain microscopy. Journal of Applied Physics, 2012, 112, .	1.1	25
137	Unconventional Antiferroelectric Phase Stabilization in Thin Film BiFeO ₃ by Interface-Induced Rotoelectric Coupling Effect. Microscopy and Microanalysis, 2012, 18, 412-413.	0.2	0
138	Frequency dependent dynamical electromechanical response of mixed ionic-electronic conductors. Journal of Applied Physics, 2012, 111, 014107.	1.1	30
139	Untangling Coupled Order Parameters at Complex Oxide Interfaces with Aberration-Corrected STEM and EELS. Microscopy and Microanalysis, 2012, 18, 318-319.	0.2	1
140	Domain Wall Geometry Controls Conduction in Ferroelectrics. Nano Letters, 2012, 12, 5524-5531.	4.5	125
141	Impact of Free Charges on Polarization and Pyroelectricity in Antiferrodistortive Structures and Surfaces Induced by a Flexoelectric Effect. Ferroelectrics, 2012, 438, 32-44.	0.3	9
142	Top electrode size effect on hysteresis loops in piezoresponse force microscopy of Pb(Zr,Ti)O ₃ -film on silicon structures. Journal of Applied Physics, 2012, 112, 052015.	1.1	6
143	Domain wall conduction in multiaxial ferroelectrics. Physical Review B, 2012, 85, .	1.1	95
144	Conductivity of twin-domain-wall/surface junctions in ferroelastics: Interplay of deformation potential, octahedral rotations, improper ferroelectricity, and flexoelectric coupling. Physical Review B, 2012, 86, .	1.1	74

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145	Roto-flexoelectric coupling impact on the phase diagrams and pyroelectricity of thin SrTiO ₃ films. Journal of Applied Physics, 2012, 112, .	1.1	18
146	Publisher's Note: Bichiral structure of ferroelectric domain walls driven by flexoelectricity [Phys. Rev. B 86, 134102 (2012)]. Physical Review B, 2012, 86, .	1.1	0
147	Ionically-Mediated Electromechanical Hysteresis in Transition Metal Oxides. ACS Nano, 2012, 6, 7026-7033.	7.3	75
148	Tunable Metallic Conductance in Ferroelectric Nanodomains. Nano Letters, 2012, 12, 209-213.	4.5	153
149	Bichiral structure of ferroelectric domain walls driven by flexoelectricity. Physical Review B, 2012, 86, .	1.1	56
150	Interface dipole between two metallic oxides caused by localized oxygen vacancies. Physical Review B, 2012, 86, .	1.1	56
151	Interfacial polarization and pyroelectricity in antiferrodistortive structures induced by a flexoelectric effect and rotostriction. Physical Review B, 2012, 85, .	1.1	100
152	Exploring Mesoscopic Physics of Vacancy-Ordered Systems through Atomic Scale Observations of Topological Defects. Physical Review Letters, 2012, 109, 065702.	2.9	36
153	Enhanced electric conductivity at ferroelectric vortex cores in BiFeO ₃ . Nature Physics, 2012, 8, 81-88.	6.5	324
154	Atomic-scale evolution of modulated phases at the ferroelectric-antiferroelectric morphotropic phase boundary controlled by flexoelectric interaction. Nature Communications, 2012, 3, 775.	5.8	145
155	Electrode size effect under PFM characterization of PZT-film on silicon structures with micro- and nanometric top electrodes. , 2011, , .		0
156	Direct Mapping of Ionic Transport in a Si Anode on the Nanoscale: Time Domain Electrochemical Strain Spectroscopy Study. ACS Nano, 2011, 5, 9682-9695.	7.3	61
157	Complete Symmetry Analyses of the Surface-Induced Piezomagnetic, Piezoelectric and Linear Magnetoelectric Effects. Ferroelectrics, 2011, 417, 100-109.	0.3	10
158	Linear magnetoelectric coupling and ferroelectricity induced by the flexomagnetic effect in ferroics. Physical Review B, 2011, 84, .	1.1	51
159	Ferroelectricity and ferromagnetism in EuTiO ₃ nanowires. Physical Review B, 2011, 84, .	1.1	22
160	Static conductivity of charged domain walls in uniaxial ferroelectric semiconductors. Physical Review B, 2011, 83, .	1.1	214
161	Strain effect on phase transitions of BaTiO ₃ nanowires. Acta Materialia, 2011, 59, 7189-7198.	3.8	32
162	Probing Local and Global Ferroelectric Phase Stability and Polarization Switching in Ordered Macroporous PZT. Advanced Functional Materials, 2011, 21, 941-947.	7.8	23

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163	Ferroelectric Materials: Probing Local and Global Ferroelectric Phase Stability and Polarization Switching in Ordered Macroporous PZT (Adv. Funct. Mater. 5/2011). Advanced Functional Materials, 2011, 21, 802-802.	7.8	1
164	Atomically Resolved Mapping of Polarization and Electric Fields Across Ferroelectric/Oxide Interfaces by Zâ€contrast Imaging. Advanced Materials, 2011, 23, 2474-2479.	11.1	79
165	Surface-induced magnetism of the solids with impurities and vacancies. Physica B: Condensed Matter, 2011, 406, 1673-1688.	1.3	24
166	Thermodynamics of electromechanically coupled mixed ionic-electronic conductors: Deformation potential, Vegard strains, and flexoelectric effect. Physical Review B, 2011, 83, .	1.1	110
167	Landau-Ginzburg-Devonshire theory for electromechanical hysteresis loop formation in piezoresponse force microscopy of thin films. Journal of Applied Physics, 2011, 110, .	1.1	24
168	Nanoscale electromechanics of paraelectric materials with mobile charges: Size effects and nonlinearity of electromechanical response of SrTiO $\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle\text{mml:mrow}>\langle\text{mml:msub}>\langle\text{mml:mrow}>/>\langle\text{mml:mrow}>\langle\text{mml:mn}>3</\text{mml:mn}>\langle\text{mml:mrow}>\langle\text{mml:msub}>\langle\text{mml:mrow}>\langle\text{mml:math}>\text{films.}$	1.1	73
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